## SACRAMENTO DISTRICT INSTRUCTIONS TO: CEGS-02559

In the Sacramento District all reference to the usage of tar shall be eliminated. The following reference publications and paragraph are not applicable to the Sacramento District area:

Delete the following publications in all projects:

AASHTO M 52	ASTM D 490
AASHTO M 81	<b>ASTM D 633</b>
AASHTO M 82	ASTM D 2026
AASHTO M 140	ASTM D 2028
AASHTO M 208	
AASHTO M 40	

Reference PART 1 GENERAL, paragraph MEASUREMENT FOR PAYMENT:

Delete the bracketed words: [in accordance with ASTM D 633 for tar] in all projects.

Reference PART 2 PRODUCTS, paragraph BITUMINOUS MATERIAL, for the Sacramento District, shall read as follows:

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NOTE: Remove brackets from around the material to be allowed in the contract specifications and delete the other materials and references.

a.If CUTBACK ASPHALTS are used, one of the following types and grades can be recommended:

Medium-Curing Type (ASTM D 2027, MC-30, MC-70, MC-250).

Selection of a particular type and grade should consider the nature of the surface to be treated. An open base course material will be penetrated readily, and all of the above grades can be considered except for the low viscosity MC-30. A tight surface is not going to be penetrated as readily; therefore, the less viscous materials are recommended such as MC-30 and MC-70. Cutback asphalts can be used in cold-weather

construction with less concern than emulsions which contain water. Less viscous grades may be used for cold-weather construction such as MC-30 and MC-70.

b. There are two types of emulsions that can be used for prime coats. A list of recommended emulsion grades by type is as follows:

Anionic Emulsions (ASTM D 977): SS-1, SS-1h, RS-1 Cationic Emulsions (ASTM D 2397): CSS-1, CSS-1h, CRS-1

Penetration and coating will be most efficient at about optimum moisture content. Water dilution of the emulsion is also required to reduce viscosity.

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[Cutback asphalt] [Emulsified asphalt] shall conform to [ASTM D 977] [ASTM D 2027] [ASTM D 2397], Grade [ ].

Reference PART 3 EXECUTION, for Sacramento District insert the following directly below the paragraph PREPARATION OF SURFACE:

(Para No.) Preparation of Emulsion

The emulsion is diluted by adding an equal volume of compatible water. If the emulsion is to be diluted in the field, test first by placing an equal volume of emulsion and compatible water in a glass quart jar (do not use a metal container as it could cause the emulsion to "break"), mix for one minute. If the emulsion "breaks", another water source or a different emulsion is required.

Reference PART 3 EXECUTION, paragraph 3.2.2 Application Temperature, NOTE, for the Sacramento District, shall read as follows:

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NOTE: Remove brackets from the material to be allowed in the specification and delete the other materials in brackets.

NORMAL SPRAY APPLICATION TEMPERATURES FOR CUTBACK ASPHALTS

MC- 30 85-190 degrees F
MC- 70 120-225 degrees F
MC-250 165-270 degrees F
RC- 70 120-225 degrees F
RC-250 165-270 degrees F

These temperature ranges include or exceed the flash point of the material, and care should be taken in their heating.

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Emulsified asphalt application temperature shall provide; an application viscosity between 10 and 60 seconds, Saybolt Furol, or between 20 and 120 centistokes, kinematic. The temperature viscosity relation shall be furnished to the Contracting Officer. Application temperature shall be within the following ranges as directed:

Reference PART 3 EXECUTION, paragraph Application, for Sacramento District, disregard the following NOTE:

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NOTE: Remove brackets from around last two sentences if a tar material is used or delete the last two sentences if tar is not used.

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Also, for the Sacramento District, DELETE THE FOLLOWING BRACKETED SENTENCES at the end of paragraph 3.2.3 Application:

[Full-face organic vapor-type respirator and protective creams shall be used by personnel exposed to tar fumes. Protective creams shall not be used as a substitute for cover clothing.]